# **/\*The SAS program (HEI-2010 Individual Scores using NIH-AARP food frequency data)**

# **PerDay.SAS \*/**

**/\*INSTRUCTIONS – complete tasks 1-4 in this section, and run these SAS codes before proceeding to the HEI-2010 scoring program that follows\*/**

/\*1. Create a folder on your computer “home folder”, and save the AARP data, and the required HEI-2010 macros in it. Specify the path to the folder. \*/

%let home = C:\Users\Documents\AARP; /\*In this Example, the “home” folder is in C Drive, within Documents, and is called AARP. \*/

/\*2. Libname here specifies the input file. \*/

libname in “&home\in\ffq”; /\*In this Example, the AARP data “ffq”, are in a folder called “in”, saved within the “home” folder. This is a SAS dataset. \*/

/\*3. Create a folder in the "home" folder, where the output file, containing HEI-2010 component and total scores for each respondent, for the intake day, are to be exported. Specify the name of the folder. \*/

filename res “&home\res”; /\*In this Example, the folder is called “RES”, within the “home” folder, and the exported results will be a csv file called “aftermac”. \*/

/\*4. Read in required HEI-2010 scoring macros. These macros must be saved within the home folder. \*/

%include “&home\hei2010.beanspeas.allocation.macro.sas”;

%include “&home\hei2010.score.macro.sas”;

/\*NOTE: Once you have completed all the steps above, all you need to do is run the SAS program below. Unless you used different names for your dataset and folders, no other action is required from you. \*/

TITLE 'FFQ HEI-2010 scores - by person per day';

\*input ffq data;

**data** ffq;

set in.ffq;

/\*Section I: Calculate food group and nutrient intakes

at the individual level\*/

/\*\*\* APPLIES TO THIS SPECIFIC DATA ONLY \*\*\*\*/

\*the following statement should be commented out if using other than AARP data;

mped\_M\_SOY=**0**; \*create a variable and set to zero for AARP only;

monopoly=(fatmono+fatpoly);

ALLMEAT=mped\_M\_MPF+mped\_M\_EGG+mped\_M\_NUTSD+mped\_M\_SOY;

SEAPLANT=mped\_M\_FISH\_HI+mped\_M\_FISH\_LO+mped\_M\_SOY+mped\_M\_NUTSD;

/\*\*Calculate intake of Calories from SoFAAS\*\*/

ADDSUGC=**16**\*mped\_add\_sug; /\*calories from added sugars\*/

SOLFATC=mped\_discfat\_solid\***9**; /\*calories from solid fat\*/

maxalcgr=**13**\*(calories/**1000**); /\*max grams of alcohol based on kcal intake\*/

if alcohol <= maxalcgr then EXALCCAL=**0**; /\*consumed less than max\*/

else if alcohol > maxalcgr then EXALCCAL=**7**\*(alcohol-maxalcgr); /\*get cal from extra alc grams\*/

EMPTYCAL10=ADDSUGC+SOLFATC+EXALCCAL; /\*total empty calories in hei2010 definition\*/

**Run**;

/\*Section II: Allocation of legumes and application of the HEI-2010 scoring algorithm.\*/

/\*Step 1. Allocate legumes using the allocation macro. \*/

%***LEG2010A*** (indat=ffq,

kcal=calories,

allmeat=allmeat,

seaplant=seaplant,

v\_total=mped\_v\_total,

v\_drkgr=mped\_v\_drkgr,

legumes=mped\_legumes,

outdat=aftlegall);

/\*Step 2. Using the data set with the legumes allocated from step 1, call the HEI-2010 scoring macro

to calculate densities for each HEI-2010 component and HEI-2010 component and total scores. \*/

%***HEI2010*** (indat=aftlegall,

kcal=calories,

lv\_total=legume\_added\_mped\_v\_total,

lbeangrn=legume\_added\_BEANGRN,

f\_total=mped\_f\_total,

wholefrt=mped\_f\_nojuice,

g\_whl=mped\_g\_whl,

d\_total=mped\_d\_total,

lallmeat=legume\_added\_ALLMEAT,

lseaplant=legume\_added\_SEAPLANT,

monopoly=monopoly,

sfat=fatsaturated,

sodi=SODIUM,

G\_NWHL=mped\_G\_NWHL,

EMPTYCAL10=EMPTYCAL10,

outdat=aftermac);

**run**;

\*display the results;

**proc** **means** n nmiss min max mean;

title2 'look at all hei 2010 scores....';

var vegden--HEI2010\_TOTAL\_SCORE;

**run**;

**proc** **export** data= aftermac

file=res

dbms=csv

replace;

**run**;